

 UNIFIED THEORY OF MATTER
Application to Electricity – by Samuel P. Costin © 1999

Thave received an overwhelming response to my Unified Theory of Matter [see article in NEXUS 6/04] from both professional and amateur science researchers alike. A large percentage of respondents wish me to elaborate on the application of the theory to electricity. As so many readers requested this, I have prepared the following response.

As described in the introduction, the actions of matter are the same at all levels of Nature. For example, when we observe our weather, we see winds occur when low pressure and high pressure systems converge. The direction of the wind is always from the high pressure to the low pressure region. Higher pressure is a signature of faster particle spin velocity, and lower pressure of slower particle spin. Hence, at particle level, spin acceleration will always occur in the same direction, from fast to slow. Just as this is experienced every day in our weather, so it also occurs every day at the particle level. It is, in fact, the cause of electricity.

Another indicator of fast particle spin velocity is heavy mass, as the faster a particle's spin velocity the heavier it becomes. Also, the increase in spin velocity will pull the particles closer together, also contributing to the heavier mass.

Imagine two objects adjacent to each other and each object has a different particle spin to the other. The spin velocity of the faster spinning particles will slow down and the spin velocity of the slower spinning particles in the adjacent object will increase.

A common source of electricity is a battery. A battery consists of two separate materials of different mass, usually chemicals referred to as "electrolytes". One electrolyte always has a heavier mass than the other. Chemicals with the heavier mass also have the faster particle spin.

Another way of achieving faster particle spin is with acceleration, as in car batteries where a common electrolyte of sulphuric acid is used in each cell. The particle spin of one of the cells is accelerated faster than the other by charge from the car's generator. Should these two cells of different particle spin be joined by a copper wire, then, just like the wind, a rush of particle spin acceleration will travel down the wire to the end with slowest particle spin velocity. As a result, the particle spin of the charged cell will slow down or lose its charge.

We always call the cell with the faster particle spin "negative" and other "positive". That is why electricity always travels from negative to positive and why electricity is actually particle spin acceleration.

It has been claimed that pressure and mass are both indicators of particle spin, so these should be affected in a car battery. It has been established that faster particle spin is associated with increased weight and increased pressure. Therefore, for the particle spin velocity to change, the weight of the poles at either end of the wire must also be observed to change.

This is exactly what happens in a car battery, as the mass of the negative pole increases during charging and reduces when discharging. This is observed as oxidation, where the mass of a lead pole will reduce to lead oxide as it is discharging. Conversely, the positive pole will change from lead oxide to lead whilst receiving particle spin acceleration through the copper wire. Should the pole be immersed in a gas, the higher the pressure of the gas, the greater the charge (particle spin).

Faraday found that the weight of any substance produced at an electrode is directly proportional to the quantity of electricity that passes between the electrodes. He went further to state that the weight of substances produced at the electrodes by the electricity (particle spin acceleration) is in the same proportion as the change in atomic weight (particle spin velocity).

Obviously, the shorter the distance between the poles, the faster the particle spin acceleration of the positive cell.

It is interesting to note at this stage that other indicators of particle spin acceleration—heat and light—are also evident at the connection of the poles during rapid spin acceleration.

So, by placing a lead pole into a sea of accelerated particle spin—like charged sulphuric acid—particle spin will be accelerated down the wire to the end with the slower



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particle spin velocity.

It was established in the introduction to this theory that a similar "sea of accelerated spin velocity" also exists around a magnet. So, placing a copper wire into this "sea of acceleration" will create the same effect. This is how an electrical generator works.

So, to summarise the common terms used in electricity:

*Potential difference* (volts) is the difference in particle spin velocity between any two points on a conductor.

A *conductor* is a medium through which particle spin acceleration may travel.

*Resistance* (ohms) is the amount of spin acceleration lost during its travel through a conductor.

*Current* (amps) is the amount of particle spin acceleration.

A way of testing this theory against the "electron" theory would be to place a conductor in the field of an artificially manufactured, radioactive substance. The resulting amperage should be significantly greater than with permanent magnets.

I trust this will assist readers' curiosity about this theory. Should anyone have any further questions, I will be only too pleased to assist.

I am currently formulating a similar response on gravity, which was also prominent in the readers' requests for further information.

(Source: Samuel P. Costin, 11 July 1999, PO Box 234, Hamilton Hill, WA 6169, Australia, e-mail jenninecostin@ netscape.net)

#### SUCCESSES WITH COLD FUSION & NEW-ENERGY EXPERIMENTS

by Hal Fox © 1999

A s a professional scientist I have spent the past ten years (plus), since the announcement of "cold fusion", tracking down, investigating and reporting on a variety of proposed new-energy devices. Our group (Fusion Information Center and Trenergy, Inc.) has published hundreds of articles and collected, read and reported on over 3,000 professional papers on various new-energy devices, systems, proposals and theories. In a capsule, here are the results:

1. Cold fusion *does* work. Over 600 papers from over 200 laboratories in 30 countries have reported successes. However, none of the varieties of cold fusion devices (as yet) is robust and easily replicated, so there is no threat to the hotfusion community.

2. The Cincinnati Group has shown both excess thermal energy and nuclear reactions from a special electrochemical configuration. The most important finding is the ability to reduce the radioactivity in some aqueous solutions.

We have replicated and extended this work in Trenergy's laboratory and have reported the results in a meeting of the American Nuclear Society. Some similar (but different configuration) low-energy nuclear reactions have been accomplished and fully reported by Professor George Miley, editor (until 1999) of *Fusion* 



*Technology*, the international journal of the American Nuclear Society.

This work is now being extended to the on-site stabilisation of high-level, radioactive, spent-fuel pellets by the Trenergy group. This work is being performed with private funds so that the intellectual property rights are preserved. Several patents are pending.

3. The newest work of Prof. Ruggero M. Santilli has shown that a special type of underwater arcing can produce a combustible gas from carbon-containing wastes (sewage and other types of contaminated water). This gas can be produced to provide two-and-one-half times as much energy output as energy input to create the gas. Patents are pending. The work is being supported and commercialised by Toups Technology Licensing, Inc. of Florida.

4. Dr Randell Mills has shown that energy can be obtained by the collapsing of the hydrogen atom below its normal groundstate. For further information, including a paper presented before the American Chemical Society in early October 1999, see website www.blacklightpower.com. Patents are pending.

5. Kenneth Shoulders (see US Patent No. 5,018,180) has shown how the use of high-density charge clusters can produce both excess thermal and direct electrical energy. Up to now, the devices have been small (about one watt per device). Plans have been made and private funding is being used to scale up these thermal and direct electrical output discoveries. According to the patent, the excess energy apparently comes from tapping the vacuum energy of space.

These are the unemotional facts about new energy. There are several other developments that could be cited. However, these are the patented (and patent-pending) discoveries that are being commercialised. In all cases, the research and development have been done with private funds (except possibly for some work done by Prof. George Miley). The US Department of Energy has yet to discover and officially announce these new-energy processes.

Anyone who desires to condemn *all* new-energy projects as fraudulent is, of course, either vastly misinformed or working under someone else's agenda. The genuine, new-energy development program is vigorous, scientific, privately funded, patented, and (as with the above items 3, 4 and 5) is being commercialised.

There is nothing that the new-energy

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detractors can do that will prevent the increasingly rapid commercialisation of new-energy devices and systems. The most important aspect is the following: there is no need for government funding. Government funds only delay projects and add to paperwork.

The end result is that the Department of Energy will find it increasingly difficult to get funds for energy development when it has been so reluctant to fund anything but hot fusion for so many years. It has really failed in its assigned mission to develop new energy sources.

— Hal Fox, 18 October 1999

## COLD FUSION CONSPIRACY?

The following is edited from a briefing paper by Hal Fox, President of the Fusion Information Center, submitted to an inquiry by the US Commerce Department's Office of the Inspector-General. The department is investigating complaints that the Office of Patents and Trademarks is not allowing any patent applications for cold fusion or low-ener gy nuclear reactions to be processed beyond being rejected. — Ed.

### A. Background

As the director of the first research laboratory at the University of Utah Research Park, I was intensely interested in the March 23, 1989 announcement of cold fusion, called by the University of Utah administration (not called by Pons

and Fleischmann). The announcement of a new source of energy was most exciting to me. That day I began the plans for trying to be of some help (systems engineering background, missile system specialist for several years). By mid-April 1989, we had organised the Fusion Information Center and obtained offices at the University of Utah Research Park.

By July 1989, we had decided that information-gathering and publishing such information would be our best role. Our first edition of *Fusion Facts* was published in July 1989 and continued as a monthly publication for several years before being incorporated as part of the *Journal of New Energy*, a peer-reviewed, quarterly, scientific journal (abstracted from the first issue by *Chemical Abstracts*, the world's foremost scientific abstracting organisation).

### B. Attacks on Cold Fusion

By the fall of 1989, it was apparent that someone had organised and was carrying out a campaign against the new technology of cold fusion. All of this was done in secrecy (except for the ERAB subcommittee). Here are the facts, insofar as we have been able to gather and publish them.

A subcommittee of the Energy Research Advisory Board travelled to various laboratories where successes in cold fusion had been claimed. If the researchers were measuring neutrons, they were told that it was background radiation. If the researchers were getting tritium, they were told that it was contamination. If excess heat was being produced, they were told that they didn't have proper calorimetry. Except for one small paragraph demanded by one of the honest members of the committee, the ERAB final report was entirely negative about cold fusion.

An arrangement was made for someone in the Office of Patents to ensure that no

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cold fusion patent application was accepted for patenting (whether any type of coercion or reward was involved is unknown). Each person, as far as we have been able to determine, was sent the same information: a copy of a newspaper article from the *New York Times*, saying that cold fusion doesn't work; and a copy of the paper by 16 PhDs from MIT [Massachusetts Institute of Technology] stating that they could not replicate cold fusion (this is the paper where the authors removed the data showing that they *did* get a small amount of excess heat).

A person (representing powers-that-be in Washington, DC) called many of the physics and chemistry departments at major universities in the United States. Here was his message as relayed to me from one such department: "If you have so much as a graduate student working on cold fusion, you will get no contracts out of Washington."

All editors of the major scientific jour-

nals were contacted and were instructed not to publish articles on cold fusion. All editors but one then set up barriers against cold fusion publication. The one editor who did not accept that type of instruction was Professor George Miley of *Fusion Technology*.

An amount of US\$30,000 (or \$40,000 according to different sources) was given to Random House to have a "hatchet job" done against cold fusion. The result was the widely acclaimed (by orchestration) book by Gary Taubes, *Bad Science: The Short Life and Weird Times of Cold Fusion* (1993). For one knowledgeable about cold fusion developments, it is obvious that this book was a deliberate hatchet job.

In addition to the above well-orchestrated activities, some appointed or selfappointed scientists have been very active in travelling to conventions, etc., and doing

their best to challenge any positive cold fusion results. Two of these are (were) Dr Douglas R. O. Morrison (CERN, Switzerland) and Professor John R. Huizenga (University of Rochester), chairman of the ERAB subcommittee (if my memory is correct).

One of the most active protagonists has been Robert Parks, with some association with the American Physical Society. (The current president of the American Physical Society denied in a recent conversation that Robert Parks speaks for the Society.) Parks was instrumental in preventing a recent conference from being

Neuting a recent conference from being held in a proffered auditorium in a government facility. Parks has an e-mail list of many people in the Department of Energy and, about once a month or more often, sends out statements that ridicule any cold fusion or low-energy nuclear reaction experiments, papers, books, etc.

Please recognise that this anti-coldfusion program was a very well planned and orchestrated scheme to destroy cold fusion. These were clever and well-executed operations. We have been told that were it not for *Fusion Facts* and its rapid exchange of information of successes in various parts of the world, cold fusion would have been dead. That is more credit than we deserve.

— Hal Fox, 6 August 1999

(Source: Hal Fox, President, Fusion Information Center, Institute for New Energy, Utah, USA, tel [801] 466 8680, email halfox@mail.slkc.uswest.net, website www.padrak.com/ine.